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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/536,565

05/26/2005

Koji Fujita

NY-KIT 397-US

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FULBRIGHT & JAWORSKI, LLP
666 FIFTH AVE
NEW YORK, NY 10103-3198

EXAMINER

BEX, PATRICIA K

ART UNIT

PAPER NUMBER

1743

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/536,565

Applicant(s)

FUJITA, KOJI

Examiner

P. Kathryn Bex

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/26/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: it is not clear whether “the cavity” in claims 5 and 6 is referring to the “grating cavity” or “annular cavity” described throughout the specification, see paragraph [0035].

Claim Rejections - 35 USC § 112

3. Claims 5 and 6 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a “grating cavity” and an “annular cavity”, as described in paragraph [0035], does not reasonably provide enablement for “a cavity”. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope

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with these claims. The grating-like cavity surrounds each through hole and the annular cavity is in the form of a groove that surrounds the matrix of through holes (see paragraph [0035] of the instant specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the plate-like body" and "the substrate"; claim 6 recites "the plurality of through holes". There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Manns, (US Patent no. 5,679,310).

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Manns teaches a biochemical vessel comprising a plate-like body 34 having a plurality of through holes 30 along a thickness thereof, and a substrate bonded to one face of the plate-like body via an adhesive (column 4, lines 55-61). The substrate integrally forms projections (40; Figs. 6-12) which engage the edges of the respective through holes around the entire peripheries thereof.

8. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Manns et al., (US Patent no. 5,457,527).

Manns et al., teach a biochemical vessel comprising a plate-like body 11 having a plurality of through holes 13 along a thickness thereof, and a substrate 12 bonded to one face of the plate-like body via an adhesive (column 5, lines 4-5). The substrate integrally forms projections 14 which engage the edges of the respective through holes around the entire peripheries thereof.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Manns, (US Patent no. 5,679,310) in view of Ford, (US Patent No. 4,722,598).

As discussed above, Manns discloses the biochemical vessel substantially as claimed. However, Manns fails to specifically disclose a cavity formed between the bond surfaces of plate-like body and the substrate; the cavity forming a gap.

Ford teaches a biochemical vessel, wherein the vessel includes a plate-like body 2 with wells 4 formed therein having a substrate 3 which engages the wells. Moreover, Ford discloses a cavity which produces a gap 20 (Fig. 3) between bonding surfaces of the plate-like body and substrate. With respect to claim 6, the cavity forming the gap surrounds the wells and provides place for leakages of liquid sample material to flow if the seal around the wells is broken (column 3, lines 46-48.)

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the biochemical vessel of Manns, a gap that surrounds the wells, as taught by Ford, in order to provide a place for leakages of liquid sample material to flow if the seal between the plate-like body and

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substrate is broken, thereby, avoiding contaminating adjacent wells (column 3, lines 46-48.)

12. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manns et al., (US Patent no. 5,457,527) in view of Ford, (US Patent No. 4,722,598).

Manns et al., disclose the biochemical vessel substantially as claimed. However, Manns et al., fail to specifically disclose a cavity formed between the bond surfaces of plate-like body and the substrate; the cavity forming a gap.

Ford teaches a biochemical vessel, wherein the vessel includes a plate-like body 2 with wells 4 formed therein having a substrate 3 which engages the wells. Moreover, Ford discloses a cavity which produces a gap 20 (Fig. 3) between the plate-like body and substrate. With respect to claim 6, the cavity forming the gap surrounds the wells and provides place for leakages of liquid sample material to flow if the seal around the wells is broken (column 3, lines 46-48.)

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the biochemical vessel of Manns et al., a gap that surrounds the wells, as taught by Ford, in order to provide a place for leakages of liquid sample material to flow if the seal between the plate-like body and substrate is broken, thereby, avoiding contaminating adjacent wells (column 3, lines 46-48.)

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are as follows: Rahbar-Dehghan et al., (US Patent no. 6,587,197), which teach a glass panel defines a top flat surface, a bottom bearing surface, and at least a few channels extending generally parallel to each other from top to bottom surfaces wherein each channel is obliquely inclined so as to make a significant acute angle relative to an axis perpendicular to said top flat surface; Oikari et al., (US Patent no. 5,329,123), Szlosek (US Patent nos. 5,759,494); Lehtinec et al., (US Patent no. 5,061,853); Sonne et al., (US Patent no. 5,298,753) teach various microwell plates for preventing optical crosstalk between wells.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Bex whose telephone number is 571-272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should


you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PKB


Jill Warden
Supervisory Patent Examiner
Technology Center 1700